Dr. H. Fraenkel-Conrat,
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BERKELEY 4,
California,
U.S.A.

1st November, 1955.

Dear Dr. Fraenkel-Conrat,

Thank you very much indeed for a wonderful selection of preparations. It is really very kind of you to go to so much trouble for us. I am starting work immediately on what you sent. If it is some time before you hear any more news of these materials don't think I have forgotten about them. "Ageing" is a very important factor in the preparation of well-orientated specimens.

In fact your earlier Hg preparation which gave a lot of trouble last May and June has now evolved to form some really excellent specimens. Quantitative work on these is under way, and we hope to be able to locate the Hg in 3 dimensions. It seems to lie on a radius of approximately 60 A.

It is with A-protein that ageing is most important, and we hope to be sending you a note about this in a few days' time. The un-aged material has a way of becoming completely non-birefringent within a few hours (or days) of being orentated. Your Hg - A protein does this, but not quite so badly as Schramm's A-protein, so I am quite hopeful about getting good specimens from it after further ageing. If this is successful, it probably ought to be compared with some of your A-protein rather than with Schramm's but don't bother about this until I let you know that I have some Hg-A protein photographs good enough to justify such a comparison.

What we can get out of the new iodinated materials will, of course, depend on whether or not the I is all on one tyrosine. If it is, I think there should be a good chance of locating it.

I think the only point in our looking at your reconstituted virus would be if you were interested in having an independent check on the proportion of the material which had RNA

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situated as in TMV. The equator of the X-ray diagram is so different for TMV and the protein that it should be possible to get a semi-quantitative estimate of this. If the material is not abnormally difficult to orientate, it should be possible to work with 2 - 3 m.g.

I shall, of course, let you know as soon as we get any results from your preparations.

With best wishes,

Yours sincerely,

Rosalind Franklin.